REMARKS

Claims 1, 2, 4-7, 10, 12, 17, 18, and 40-46 are pending in the application. Claims 8, 19-20 and 25-31 have been canceled. Claims 1, 9, 40 and 41 have been amended. No new matter has been added.

The Examiner has confirmed claims 3, 8, 9, 11, 13-16, 19-39, 47-53 are withdrawn. Applicants however, respectfully request that claims 21-24 be rejoined as they are drawn to an elected species.

The Examiner's remarks in the last Office Action are addressed below. It is believed that the claims and all dependent claims, taken in light of the remarks made herein, meet all criteria for patentability.

CLAIM OBJECTIONS

The Examiner has objected to claims 40 and 41 "as being of improper dependent form for failing to further limit the subject matter of a previous claim." Specifically, "claims 40 and 41 recite[] compounds with oxo substituent in L or CO as Y2, (e.g., potassium 2-oxo-6-pheny-3, 5-hexadienoate), such compounds are out of the scope of claim 1 since claim 1 does not include compounds, of which L is substituted with oxo, or Y2 is -CO-."

Claims 40 and 41 have been amended to expedite prosecution. Applicants reserve the right to further prosecute the canceled subject matter of these claims in a subsequent related patent application.

CLAIM REJECTIONS

Rejection of claims under 35 U.S.C. § 103 over Richon et al.

The Examiner has rejected claims 1, 2, 4-7, 10, 12, 17, 18, and 43 under 35 U.S.C. § 103(a) as being unpatentable over Richon et al. The Examiner states that

> Richon et al teaches that certain hydroxamic acids, which are within the scope of the general formula defined in claim 1, inhibit histone deacetylase, induce terminal differentiation, and or apoptosis in various transformed cells, see the abstract. With respect to the compounds, note compound 7 in table 1 of Richon et al. is within the scope of the formula (I), wherein L is a straight C5 hydrocarbon chain, Y1 is a bond and Y2 is -NR^c-CO-NR^d-, (or considering Y2 is a bond and L is interrupted by - NR^c -CO- NR^d -), and A is halo substituted aryl. Further the references teaches [sic] that compounds [sic] variation of L, Y1, Y2 and A, as suggested

herein, still provide the activity. The variations include unsaturated carbon bond in L. [S]ee the table 1 in Richon et al.

The Examiner further states that "Richon does not teach steps of determining the level of acetylated histone as recited in the claims," and "it would have been prima facie obvious ... to judge efficacy of the treatment by determining whether the level of acetylated histone in the treated cells is higher than in untreated cells since it is known the treatment is realized by inhibiting histone deacetylase."

Applicants respectfully traverse this rejection.

Compound 7 as described in Richon et al does not teach or suggest the compounds used in the method of claim 1. To begin with, the L group of claim 1 contains at least one double bond, at least one triple bond, or at least one double and one triple bond. Compound 7 is distinct from compounds of claim 1 as the L hydrocarbon chain in compound 7 is saturated.

Applicants also wish to refer the Examiner to the decision of the Board of Patent Appeals and Interferences (*Ex parte* Hsuan-Yin Lan-Hargest, Paper No. 19). In considering previous claim rejections under 35 U.S.C. § 103 over Richon et al. and Marks et al. references , the Board has concluded that "[o]n this record, the examiner did not provide the factual evidence necessary to establish that either reference discloses or suggests the elected species that is a requirement of every claim" (page 6). Clearly, the Board finds that the Richon et al reference does not teach or suggest the method of claim 1. Moreover, the Examiner has failed to provide factual evidence that establishes that the elected species is taught or suggested by the reference.

Thus, Applicants respectfully request reconsideration and withdrawal of this rejection.

Rejection of claims under 35 U.S.C. § 103 over Richon et al in view of Marks et al.

The Examiner has further rejected claim 42, and 44-46 as being unpatentable over Richon et al in view of Marks et al. The Examiner acknowledges that Richon et al "do[es] not teach expressly the in vivo application of the histone deacetylation inhibitors or thereby treating cancers." The Examiner states that "Mark et al teaches that hydroxamic acids encompassed [sic] those disclosed herein, as histone deacetylase inhibitors, are potentially effective agent [sic] for cancer therapy, [sic] see the abstract." The Examiner alleges that "it would have been prima facie obvious ... to use compound 7 of Richon et al for in vivo application, or for treating

cancers, since hydroxamic acids, as histone deacetylase inhibitors, are known to be useful for cancer therapy." Applicants respectfully traverse this rejection.

In order to render a claimed invention obvious, the combined teachings of prior art references must disclose or suggest all elements of the invention, or motivate a person skilled in the art to modify the reference teachings so as to arrive at the claimed invention.

Applicants assert that compound 7 in Richon et al. contains a saturated L chain and is distinct from compounds used in the method of claim 1. There is no motivation or suggestion within Richon et al., or within Marks et al references to modify compound 7. Thus, Richon et al., and Marks et al., taken together or separately, do not teach or suggest the method of independent claim 1 and dependent claims 42 and 44-46.

Again, this argument is supported by the Board of Patent Appeals and Interferences in *Ex parte* Hsuan-Yin Lan-Hargest (Paper No. 19). The Board has reviewed both Richon et al and Marks et al references in light of previous 103(a) rejections and concluded that "[o]n this record, the examiner did not provide the factual evidence necessary to establish that either reference discloses or suggests the elected species that is a requirement of every claim" (page 6).

Hence claims 42, and 44-46 which depend from claim 1 are patentable over Marks et al. or Richon et al. references. Applicants respectfully request reconsideration and withdrawal of this rejection.

Rejection of claims under 35 U.S.C. § 103 over Breslow et al.

The Examiner has also rejected claims 1, 2, 4-7, 10, 12, 17, 18, 40-46 as being unpatentable over Breslow et al. (U.S. 6,511,990). The Examiner alleges that this patent "teaches hydoxamic acids with various substituents are useful as histone deacetylase inhibitors" and "provide[s] a method of using the hydroxamic acids, or their homologs, or analogs for treating various cancers." The Examiner acknowledges however, that "Breslow et al. does not specifically recite the compounds recited herein" but notes that "hydroxamic acids disclose by Breslow et al include those with substituted and unsubstituted aryl attached to the hydroxamic acid moiety through a C3-11 carbon chain ...." Hence "the compounds disclosed by Breslow et al. overlapped [sic] with the compounds herein ...." Applicants respectfully traverse this rejection.

Applicants submit that compounds disclosed by Breslow et al. contain a saturated L hydrocarbon chain. See structural formula in Abstract of Breslow et al. Such compounds do not teach or suggest compounds used in the method recited in claim 1. Further, Breslow et al. does not provide any motivation to modify compounds disclosed within the reference. Thus, claim 1 and claims that depend therefrom are patentable over Breslow et al. Applicants respectfully request reconsideration and withdrawal of rejection with respect to Breslow et al.

CONCLUSION

For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the pending rejections. Applicants believe that the claims now pending are in condition for allowance.

The deadline for this response has been extended by the accompanying petition for a two-month extension of time. Should any fees be required by the present Amendment, the Commissioner is hereby authorized to charge Deposit Account **19-4293**.

If, for any reason, a telephonic conference with the Applicant would be helpful in expediting prosecution of the instant application, the Examiner is invited to call Applicants' Attorney at the telephone number provided below.

Respectfully submitted,

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